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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/588,598

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Bernhard Mattes

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EXAMINER

ENGLISH, JAMES A

ART UNIT

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3616

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/588,598	Applicant(s) MATTES ET AL.	
	Examiner James English	Art Unit 3616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 8-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>05/23/2008, 01/11/2008 and 08/07/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 8, 9 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Sinnhuber (US Patent No. 5,957,490).

3. With respect to claim 8, Sinnhuber discloses an airbag (7); a gas generator (8) for filling the airbag (7); an airbag control device ("control unit" – 9) for activating the airbag (7); a measurement unit ("structural unit" – 21) for acquiring a deployment speed of the airbag (7) (column 6, lines 23-13, 19-20); a connecting module ("control unit" – 9) for regulating a filling quantity of the airbag (7), taking into account the deployment speed of the airbag (7) (Figs. 3, 5-6, column 3, lines 58-67), wherein the connecting module (9) includes a flow-off valve (17a, 17b) situated between the gas generator (8) and airbag (7) (Figs. 3, 5-6, column 4, lines 12-22.), a controlled actuating unit (signal lines between control unit (9) and flap valves (17a, 17b)) for selectively sealing the flow-off valve (17a, 17b) (Figs. 2-3).

With respect to claim 9, Sinnhuber discloses the controlled actuating unit (signal lines between control unit (9) and flap valves (17a, 17b)) for selectively sealing the flow-off valve (17a, 17b) is controlled by the airbag control device (9). (Figs. 2-3.)

With respect to claim 13-14, Sinnhuber discloses the measurement unit (21) for acquiring the deployment speed of the airbag includes a transreceiver device (22, 23) for sending an optical signal into the airbag (7), and wherein at least a portion of the inside of the airbag (7) is provided with a light-reflecting coating (20). (Fig. 9, column 6, lines 15-17, 19-20 and 26-37.) Sinnhuber further discloses the deployment speed of the airbag is determined by one of measuring a propagation time of the optical signal. (Column 6, lines 33-37.)

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sinnhuber (US Patent No. 5,957,490) in view of Ochiai (US Patent No. 6,435,549 B1).

6. With respect to claim 10, Sinnhuber does not disclose using a piezo-actuator. Ochiai teaches of prior art wherein the controlled actuating unit for selectively sealing the flow-off valve includes at least one piezo-actuator ("piezoelectric element") connected to ("bonded to") one of a mechanical lever device ("strip-shaped metal plate"). (Column 1, lines 54-61.) It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Sinnhuber to

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use a piezo-actuator as described in Ochiai to control the opening and closing of a valve. (Column 1, lines 50-52.)

7. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sinnhuber (US Patent No. 5,957,490) in view of Fischer et al. (US Publication No. 2004/0051286 A1).

With respect to claim 11, Sinnhuber does not disclose using an electromagnet as a part of the controlled actuating unit. Fischer et al. teaches of an occupant protection device (12) with a vent opening (44) for directing flow of inflation fluid away from the protecting device and to selectively seal the flow-off valve includes using an electromagnet. (Paragraph 45, lines 3-9.) It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Sinnhuber to use an electromagnet to control the flow-off valve as described in Fischer et al. to improve the airbags performance when an occupant is out-of-position during an accident. (Paragraph 49, lines 1-12.)

8. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sinnhuber (US Patent No. 5,957,490) in view of Pierotti et al. (US Patent No. 5,984,351).

With respect to claim 12, Sinnhuber does not disclose a specific type of inflator. Pierotti et al. teaches of an airbag inflator (100) for filling an airbag is a cold-gas generator having a pressure vessel (1, 2) filled with a noble gas mixture under pressure, wherein the pressure vessel is sealed by a burst disc (102) that is configured to be destroyed with the aid of a pyrotechnic charge (113). (Figs. 16-17, column 6, lines 26-

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28 and column 7, lines 52-54.) It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Sinnhuber to use a cold gas generator as described in Pierotti et al. to optimize the performance of the airbag during deployment.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The reference Zecha (US Patent 7,036,846 B2) discloses using a transreceiver and an interrogation unit, used as a reflector, disposed on an airbag cushion to receive its deployment velocity.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James English whose telephone number is (571)270-7014. The examiner can normally be reached on Monday - Thursday, 7:00 - 5:30 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Q. Nguyen can be reached on (571)272-6952. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/John Q. Nguyen/
Supervisory Patent Examiner, Art Unit 3616

/James English/
Examiner, Art Unit 3616